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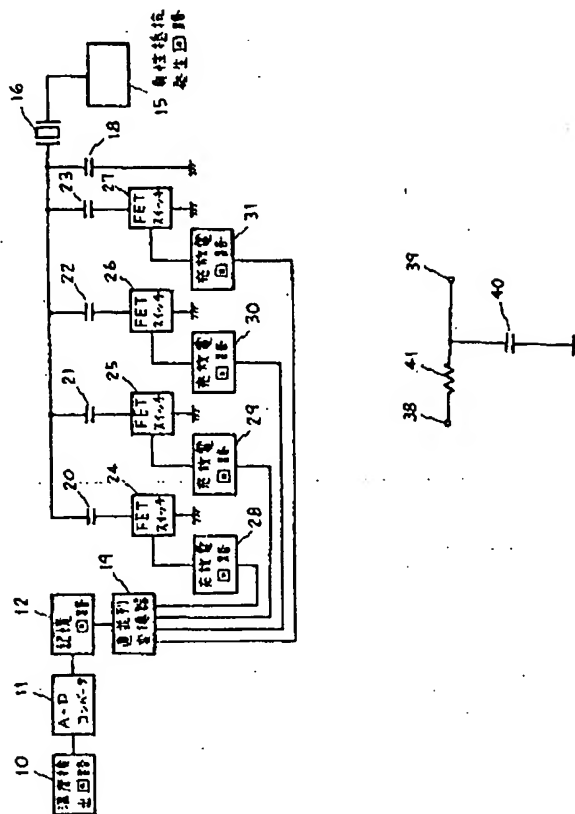
APPLICATION DATE : 30-09-85
APPLICATION NUMBER : 60214790

APPLICANT : NEC CORP;

INVENTOR : NISHIHARA TOSHIYUKI;

INT.CL. : H03B 5/32

TITLE : DIGITAL TEMPERATURE
COMPENSATION CRYSTAL
OSCILLATOR



ABSTRACT : PURPOSE: To improve the C/N and to make the titled oscillator suitable for large scale circuit integration by allowing each charge/discharge circuit to output an analog signal while the impedance of each transistor (TR) switch element is changed timewise consecutively.

CONSTITUTION: Charge/discharge circuits 28-31 each consist of a capacitor 40 and a resistor 41, a terminal 38 is connected to a serial/parallel converter 19 and a terminal 39 is connected to a gate of switch elements 24-27. Since only a gate of a MOS TR switch element is connected to the terminal 39 and the impedance of the gate is very high, it is regarded that a nearly infinite impedance is connected. That is, the charge/discharge circuits 28-31 constituting LPFs are inserted between the serial/parallel converter 19 and the switch elements 24-27 to suppress the sudden change in the oscillated frequency. Thus, the deterioration of the C/N is prevented, the oscillator is suitable for large scale circuit integration and an oscillation output with high purity is obtained.

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PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention shall be considered, for the purposes of subsequent proceedings, as the European search report

EP 04 36 8005

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	PATENT ABSTRACTS OF JAPAN vol. 0112, no. 77 (E-538), 8 September 1987 (1987-09-08) & JP 62 076801 A (NEC CORP), 8 April 1987 (1987-04-08)	1,2,11, 19,20	H03H11/12
Y	* abstract; figure 1 *	3-10, 21-25	
A	EP 0 431 887 A (SEIKO EPSON CORP) 12 June 1991 (1991-06-12) * abstract * * column 1, lines 41-55 * * column 2, lines 43-45 * * column 4, lines 25-33 * * column 4, line 39 - column 5, line 6 * * column 5, lines 39-47 * * column 6, lines 3-7,45-50 * * figures 1-4 * ----- -/--	1,2,19, 20	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H03H
INCOMPLETE SEARCH			
<p>The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims.</p> <p>Claims searched completely :</p> <p>Claims searched incompletely :</p> <p>Claims not searched :</p> <p>Reason for the limitation of the search: see sheet C</p>			
Place of search Munich		Date of completion of the search 27 October 2004	Examiner Plathner, B-D
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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